

NOTES ON *PTEROSTYLIS VITTATA*.

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Through the zeal and circumspectness of Mr. C. Walter, who for many years contributed to my collections of native plants, I have just received excellent fresh specimens of Lindley's *Pterostylis vittata*, a species easily mistaken for *P. longifolia*, and hitherto supposed to be confined to South Western Australia. The plants obtained by Mr. Walter have enabled me to draw a clearer distinction between it and a closely allied congener than from dried material could be given by Bentham in the "Flora Australiensis," and by Lindley in the first writings on this plant. It differs in robuster habit, broader leaves, of which those next to the flowers are hardly reduced in size and never changed to bracts, in the dark reddish not greenish color of the flowers, in the broader and more turgid upper lip of the calyx with thick streaks, in the labellum being smooth on the surface and at the base produced in an erect flat narrow lameolar tooth (not into a roundish tubercle), and finally in the column being provided on both sides towards the base with a semiovate membrane, and towards the summit with a dilated appendage, which terminates downward in an acute narrow long and fringed lobe.

Already in June 1848, when I found a few specimens of *P. vittata* in the valley below the great waterfall of Mount Lofty, near Adelaide, I was surprised to see among the early harbingers of the Spring this Orchid, and made therefore notes as well as on its time of flowering as on the inner structure of the flowers, but no occasion for re-examining the living plant arose to me until Mr. Walter got this species as near to us as the heath ground of Brighton, although I now find a small specimen also in my collection from Wilson's Promontory, gathered there by myself blooming during May, 1853. Near King George's Sound this plant has been obtained in flower as late as July. *P. longifolia* rarely comes into bloom, so far as the southern part of our colony and climatically similar regions are concerned, before August or September, and continues to flower till October, while in the colder regions of southern Tasmania it may be found in bloom as late as December, though in the milder clime of Port Jackson it flowers already from June to September, as recorded in Mr. Fitzgerald's splendid work on Australian Orchids. That *P. vittata* escaped here near us notice for so long a time is due mainly to its early time of flowering, in the same way as *Caladenia fimbriata* was shown only last year for the first time to occur near Port Phillip, when Mr. C. French got specimens of it while engaged in entomological searches, he finding it also as early as May in flower, when the autumnal orchids, such as *Eriochilus*, have passed away, and before the flower-world awakes in a new Spring, although *Pterostylis reflexa* and, perhaps, a few other orchids may show already their flowers equally early in the season.

The labellum of *P. vittata* is as irritable to the touch as that of any other congener, hanging down when quiescent, but shooting up with vehemence should anything foreign come in contact with it, thus closing the orifice of the calyx and perhaps trapping an insect, by which means the process of fertilisation is promoted, the labellum after a short while resuming its dependent position.